CLAIMS:

1.   A computer-based prosthodontic method for enabling a dental practitioner to define a finish line of a dental prosthesis of at least one tooth to be fitted over a tooth preparation, comprising:

5   (One) providing a three-dimensional (3D) digital data relating to the patient's dentition, said 3D data includes data representative of the surface topology of said preparation and its surroundings;

(Two) generating first finish line data representative of at least a portion of said finish line and superimposing an image of said finish line on an image of

10   said dentition;

(Three) obtaining second finish line data determined on the basis of input received from a dental practitioner; and

(Four) using said second finish line data to update said first finish line data and superimposing the updated data on the dentition image.

15   2.   A method according to Claim 1, wherein the updating of the first finish line data comprises defining a portion of the finish line not defined in said first finish line data or changing a portion of said first finish line data.

3.   A method according to Claim 1, wherein the second finish line data is generated by virtually drawing a line at the apical limit of the preparation.

20   4.   A method according to Claim 3, wherein the line is drawn in a continuous fashion.

5.   A method according to Claim 3, wherein the line is drawn by marking dots in small intervals and then forming a line by automatically connecting the dots to one another.

25   6.   A method according to Claim 1, wherein the defined finish line is used as an input in constructing a crown.

7.   A computer-based method for constructing a crown to be fitted on a tooth preparation in a subject, the method comprising defining a finish line on said

preparation to obtain finish line data and employing said data in constructing the crown; the method being characterized in that

defining the finish line comprises:

(One) providing a three-dimensional (3D) digital data relating to the patient's
5   dentition, said 3D data includes data representative of the surface topology of said preparation and its surroundings;

(Two) generating first finish line data representative of at least a portion of said finish line and superimposing an image of said finish line on an image of *said dentition*;

10 (Three) obtaining second finish line data on a finish line determined on the basis of input received from a dental practitioner; and

(Four) using said second finish line data to update said first finish line data and superimposing the updated data on the dentition image.

8.   A method according to Claim 7, wherein a virtual image of the preparation
15 with a defined finish line is presented on a suitable display medium.

9.   A method according to Claim 7, comprising:

constructing a virtual crown and virtually fitting said crown on said preparation in said virtual teeth;

generating digital data representing the three dimensional structure of the
20 virtual crown;

employing said digital data to construct a physical crown for fitting on a tooth preparation in a patient.

10.   A server utility of a computer-based system, for enabling a dental practitioner to define a finish line of a dental prosthesis of at least one tooth to be
25 fitted over a tooth preparation, said utility comprising:

(a)   a processor;

(b)   a memory coupled to the processor for storing a three-dimensional (3D) digital data relating to the patient's dentition, the 3D data including data representative of the
30   surface topology of the preparation and its surroundings;

(c) a dedicated utility coupled to or integrated with the processor for generating a first finish line data representative of at least a portion of said finish line and superimposing an image of said finish line on an image of said dentition; and

5 **(d)** a network interface coupled to the processor for transmitter to a dental practitioner computerized device at least a portion of the 3D digital data and the first finish line data and for receiving from the practitioner device data representative of a second finish line determined on the basis of practiotioner

10 input, wherein the second finish line data is used to update the first finish line data.

11. A practitioner machine for forming part of computer-based system for enabling a dental practitioner to define a finish line of a dental prosthesis of at least one tooth to be fitted over a tooth preparation, said machine comprising:

15 **(a)** a processor;

(b) a display coupled to the processor for presenting digital data relating to the patient's dentition, the digital data includes data representative of the surface topology of the preparation and its surroundings and a first finish line data representative

20 of at least a portion of a finish line, such that the first finish line data is superimposed on the dentition image;

(c) a user interface coupled to the processor for allowing entry of a dental practitioner input for the determination of a second finish line data, the second finish line data being used

25 to update the first finish line data; and

(d) a communication port coupled to the processor for receiving said digital data from a remote server utility and for conveying to the remote utility data relating to said updated first finish line data.

30(a)   .

12.   A computer-based program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for constructing a crown to be fitted on a tooth preparation in a subject, the method comprising defining a finish line on said preparation to obtain finish line

5 data and employing said data in constructing the crown; the method being characterized in that

        defining the finish line comprises:

(a)   providing a three-dimensional (3D) digital data relating to the patient's dentition, said 3D data includes data representative of the surface topology of

10 said preparation and its surroundings;

(b)   generating first finish line data representative of at least a portion of said finish line and superimposing an image of said finish line on an image of said dentition;

(c)   obtaining second finish line data on a finish line determined on the basis

15 of input received from a dental practitioner; and

(d)   using said second finish line data to update said first finish line data and superimposing the updated data on the dentition image.

13.   A computer-based computer program product comprising a computer useable medium having computer readable program code embodied therein for

20 constructing a crown to be fitted on a tooth preparation in a subject, the computer program product comprising:

        computer readable program code for causing the computer to defining the finish line comprises:

        computer readable program code for causing the computer to provide a

25 three-dimensional (3D) digital data relating to the patient's dentition, said 3D data includes data representative of the surface topology of said preparation and its surroundings;

        computer readable program code for causing the computer to generate first finish line data representative of at least a portion of said finish line and

30 superimposing an image of said finish line on an image of said dentition;

computer readable program code for causing the computer to obtain second finish line data on a finish line determined on the basis of input received from a dental practitioner; and

computer readable program code for causing the computer to us said second finish line data to update said first finish line data and superimposing the updated data on the dentition image.